Atty. Docket No. 0103-0026 (ZM0571) Customer No. 34086 First Named Inventor: Eric Matthew Elliott

CLAIMS

What is claimed is:

the second end.

- A combination targeting guide and driver instrument for use during orthopaedic surgical procedures on a bone to guide elongated members such as pins and drill bits and for imparting torque to workpieces such as screws and bolts, the instrument comprising:

 a handle having first and second ends;
 means for imparting torque to the workpiece attached to the first end; and
 means for guiding the elongated member to a desired location on the bone attached to
- 2. The combination targeting guide of claim 1 wherein the torque imparting means comprises a driver and the guide means comprises a targeting guide having at least one guide hole for guiding the elongated member to a desired location on the bone.
- 3. The instrument of claim 2 wherein the handle includes a longitudinal axis extending from the first end to the second end, the first and second ends being reversible between a first position in which the driver is positioned for use and a second position in which the targeting guide is positioned for use.
- 4. The instrument of claim 3 wherein the handle has a generally circular cross section perpendicular to the axis and an elliptical longitudinal shape such that the handle may be gripped with equal security and comfort in both a targeting guide forward position and a driver forward position to facilitate reversal of the instrument for use of either end.
- 5. The instrument of claim 2 wherein the driver comprises an engagement end extending outwardly from the handle along the handle axis and an attachment portion embedded in the handle, the attachment portion having a non-circular cross section to resist rotation relative to

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the handle, the attachment portion further having an enlarged end embedded in the handle to resist axial translation of the driver relative to the handle.

- 6. The instrument of claim 2 further comprising an extension projecting from the handle, the targeting guide being mounted on said extension such that the targeting guide is spaced from the handle, the extension projecting along the handle axis for a first predetermined distance and then bending outwardly away from the axis for a second predetermined distance such that the targeting guide is offset from the axis in one plane.
- 7. The instrument of claim 6 wherein the targeting guide is elongated perpendicular to the handle axis such that it extends between first and second guide ends offset on opposite sides of the handle axis.
- 8. The instrument of claim 2 wherein the targeting guide includes at least one guide hole for receiving the elongated member and directing it toward the bone, the targeting guide further including at least one guide hole extension tube extending from the targeting guide along the guide hole axis to provide an elongated bearing surface for supporting the elongated member, the end of the tube being scalloped to fit the contours of the bone.
- 9. The instrument of claim 8 wherein the targeting guide includes at least one sizing insert to change the diameter of the guide hole, the sizing insert including a tube having an outer diameter sized to fit within the guide hole and guide hole extension tube and an inner diameter sized to guide the elongated member.
- 10. A method for guiding elongated members such as pins and drill bits and for imparting torque to workpieces such as screws and bolts during an orthopaedic procedure, the method comprising:

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providing a combination instrument comprising a handle having first and second ends; a driver attached to the first end of the handle for engaging a workpiece for imparting torque to the workpiece; and a targeting guide attached to the second end of the handle, the targeting guide having at least one guide hole for guiding an elongated member to a desired location on a bone;

gripping the instrument with the targeting guide facing forward for use; positioning the targeting guide adjacent a bone;

guiding the elongated member to a desired location on a bone with the targeting guide;

reversing the instrument so that the driver faces forward for use; engaging the workpiece with the driver; and imparting torque to the workpiece.

11. The method of claim 10 wherein the elongated member guided by the targeting guide is a transcutaneous external fixator pin and the workpiece is part of a clamping mechanism on an external fixator, the method further comprising:

using the targeting guide to place transcutaneous external fixator pins on opposite sides of a fracture; and

using the driver to tighten the clamping mechanism onto the pin.